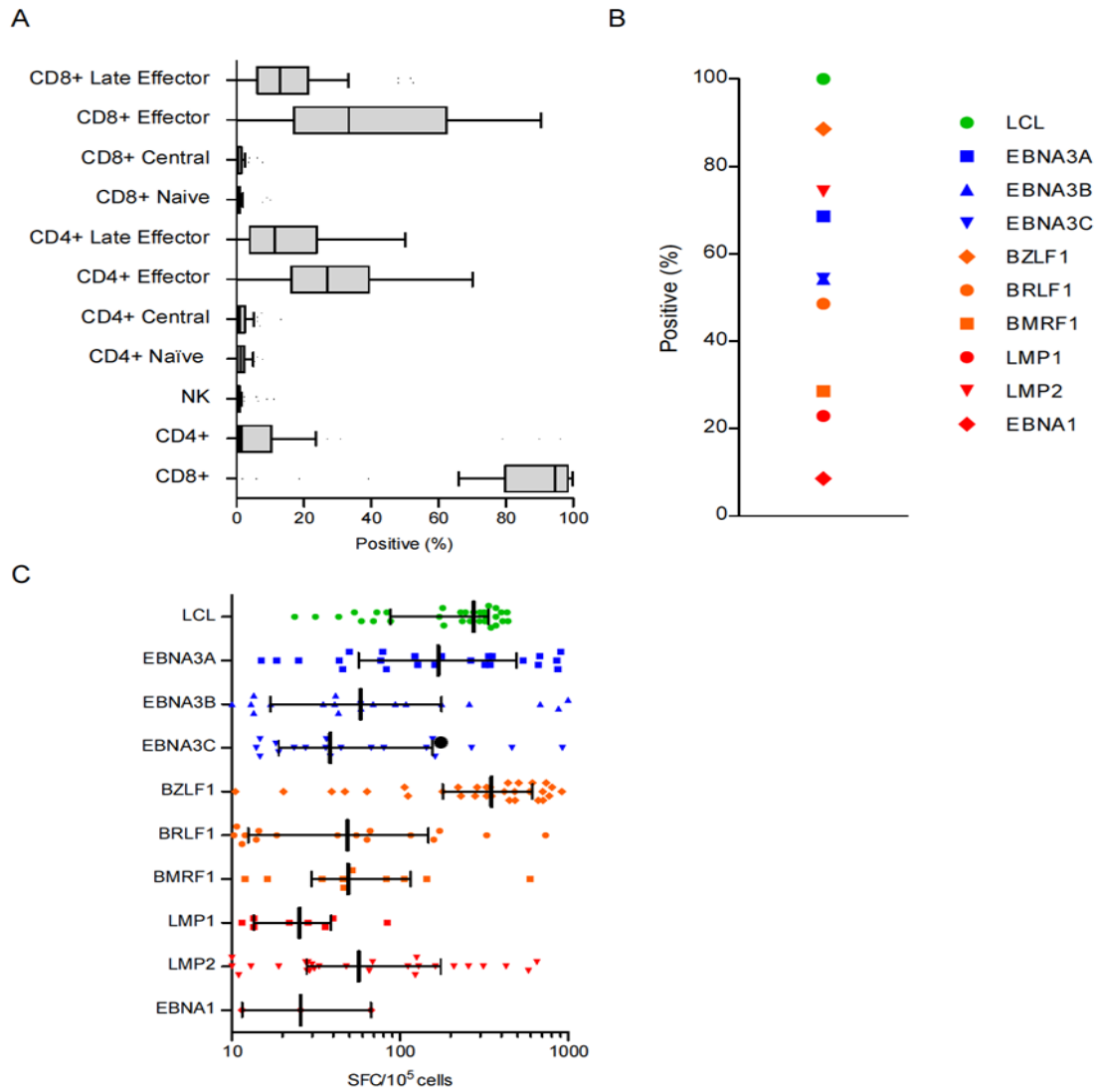**Figure S1. Characteristics of generated EBV-CTL lines. (A)** Phenotypic analysis of EBV-CTL by flow cytometry. Naïve phenotype (CD45RA+CD27+CD62L+); Central phenotype (CD45RA-CD27+CD62L+); Effector memory phenotype (CD45RA-CD27-CD62L-); Late effector phenotype (CD45RA+CD27-CD62L-). Box plot with whiskers (turkey method) is shown. **(B, C)** Antigen- specificity of EBV- CTL lines was determined by IFN-γ Elispot assays. **(B)** Percentage of positive EBV-CTL lines (≥10 SFC per 10^5 cells) according to evaluated EBV antigen and LCL. **(C)** Precursor frequency of antigen-specific T cells in EBV-CTL lines that tested positive for individual EBV antigens and LCLs. Individual results and median with interquartile range is shown.
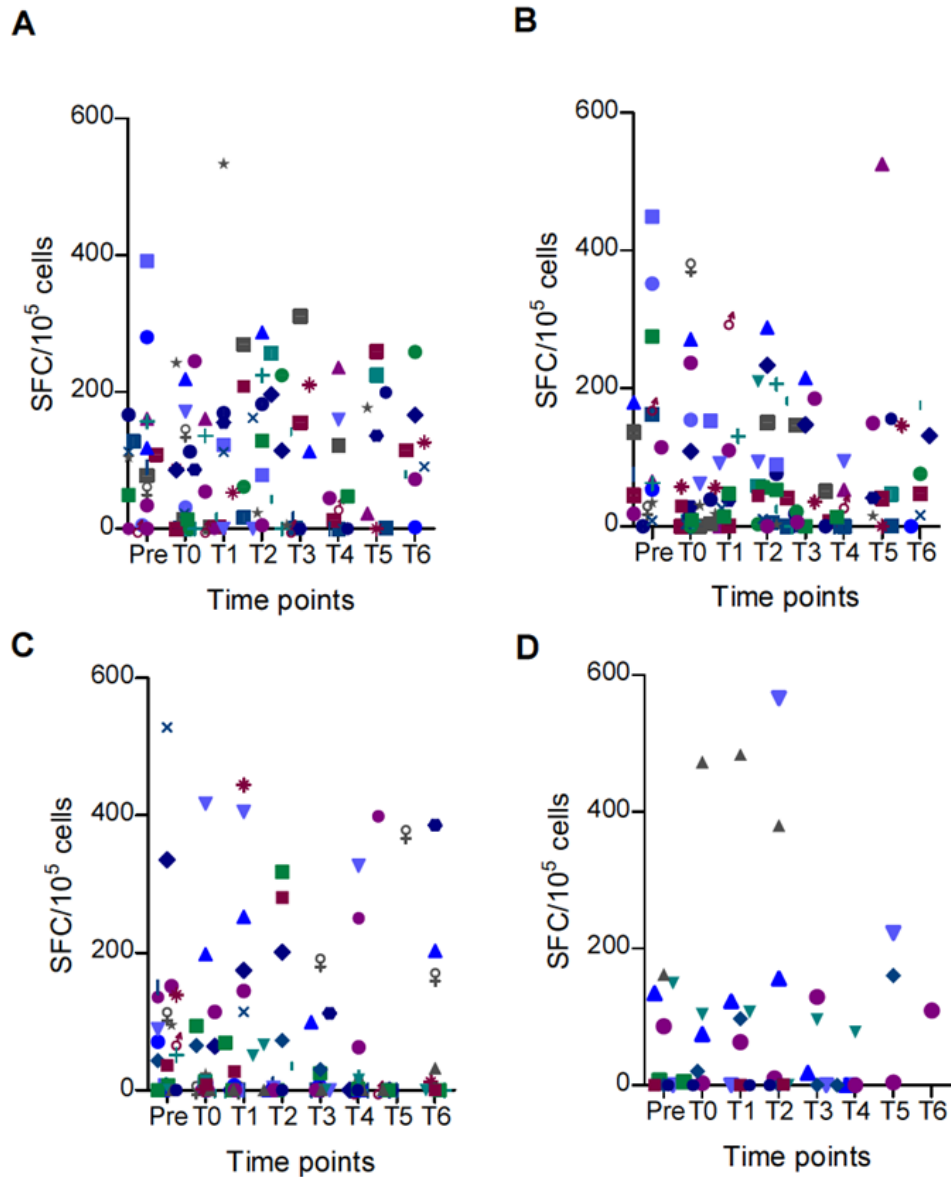
Figure S2. Precursor frequency of EBV-, LMP2-, and CMVpp65-specific T cells post GC-CTL. Blood samples were obtained pre chemotherapy (pre), and each CTL infusion (T0- T6), and the precursor frequency of **(A)** EBV-, **(B)**, CMVpp65- and **(C, D)** LMP2-specific T cells was determined in IFN-γ Elispot assays using LCL (for EBV) or pepmixes (for LMP2 and CMVpp65) as stimulators [**(B)** patients who received LMP2+ CTLs, **(C)** patients who received LMP2- CTLs]. No significant differences were observed between individual time points.
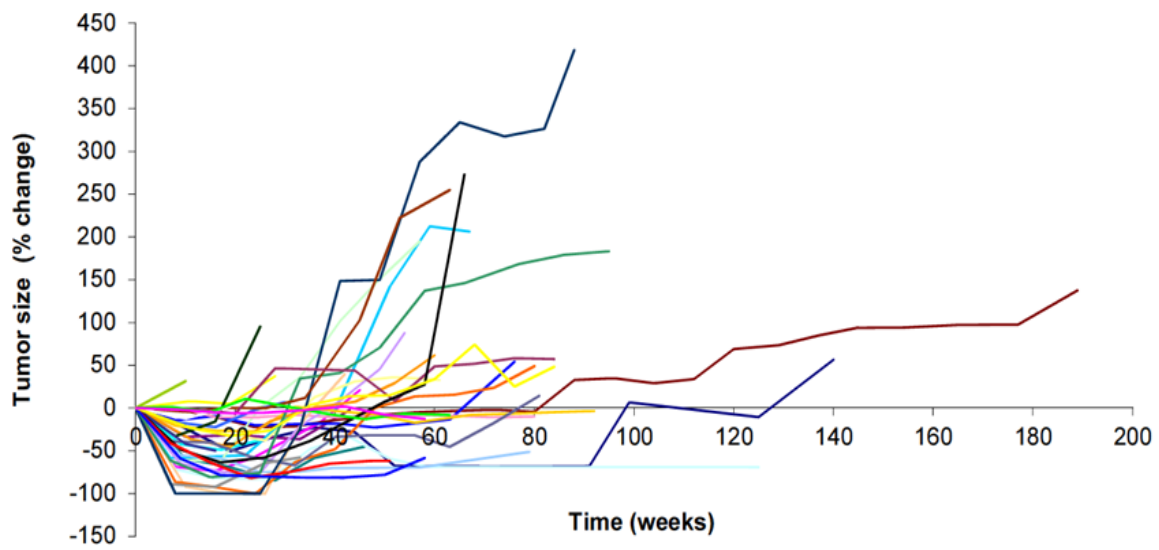
Figure S3. Tumor growth post GC-CTL therapy. Individual patient's tumor diameters were determined by serial CT or MRI. Measurements were plotted as a percentage of change over baseline. The majority of patients experienced significant reduction of tumor size during chemotherapy. A subgroup of patients had prolonged disease stabilization or slowing of tumor growth after initial disease progression.
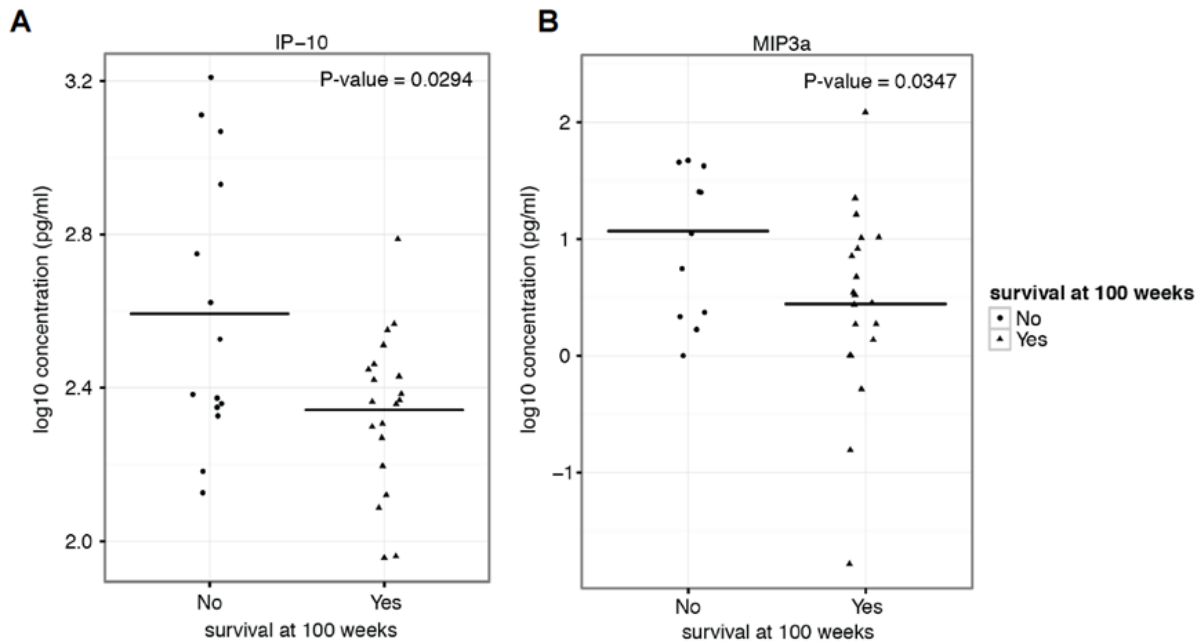
Figure S4. Plasma IP-10 and MIP3α levels correlate with OS. Baseline plasma cytokine/ chemokine levels prior to chemotherapy were assessed using a human cytokine multiplex Luminex bead array assay kit. Results were correlated with patient overall survival. Amongst 27 cytokines/ cytokines analyzed, high plasma levels of **(A)** IP-10 and (B) MIP-3α levels were predictive for poorer 100-week OS (p=0.0294 and p=0.0347 respectively).

Supplemental Table 1: Toxicities associated with Chemotherapy and CTL Infusion

Haematological Toxicities	Chemotherapy (n=38)					CTL infusion (n=35)			
	Grade 1 (%)	Grade 2 (%)	Grade 3 (%)	Grade 4 (%)	Grade 5 (%)	Grade 1 (%)	Grade 2 (%)	Grade 3 (%)	Grade 4 (%)
Decreased Total White Count			20 (52.6)	2 (5.3)				0	0
Neutropenia			23 (60.5)	8 (21.1)				0	0
Thrombocytopenia			4 (10.5)	2 (5.3)				0	0
Anaemia			1 (2.6)	0				0	0

Non-Haematological Toxicities	Chemotherapy (n=38)					CTL infusion (n=35)			
	Grade 1 (%)	Grade 2 (%)	Grade 3 (%)	Grade 4 (%)	Grade 5 (%)	Grade 1 (%)	Grade 2 (%)	Grade 3 (%)	Grade 4 (%)
Fatigue	20 (52.6)	2 (5.3)	0	0	0	11 (31.4)	1 (2.9)	0	0
Rash	6 (15.8)	1 (2.6)	0	0	0	3 (8.6)	0	0	0
Gastrointestinal related	5 (13.2)	0	0	0	0	1 (2.9)	0	0	0
Dizziness	1 (2.6)	0	0	0	0	1 (2.9)	0	0	0
Nausea/vomiting	3 (7.9)	0	0	0	0	1 (2.9)	0	0	0
Neuropathy	8 (21.1)	0	0	0	0	1 (2.9)	0	0	0
Cardiac related	0	0	0	0	0	1 (2.9)	0	0	0
Myalagia	2 (5.3)	0	0	0	0	2 (5.7)	0	0	0
Dry mouth	1 (2.6)	0	0	0	0	1 (2.9)	0	0	0
Fever	2 (5.3)	0	0	0	0	2 (5.7)	0	0	0
Bleeding	1 (2.6)	0	0	1 (2.6)	0	0	0	0	0
Cough	1 (2.6)	0	1 (2.6)	0	0	1 (2.9)	0	0	0
Alopecia	1 (2.6)	0	0	0	0	0	0	0	0
Pneumonia	0	0	0	0	1 (2.6)	0	0	0	0
Meningitis	0	0	0	0	1 (2.6)	0	0	0	0
Hypertension/Hypotension	0	0	0	0	0	1 (2.9)	0	0	0

Supplemental Table 2: Overall Survival of Patients by LMP2 Status

	Total (n = 34*)	LMP2- (n = 9)	LMP2+ (n = 25)	P-value
Overall Survival (OS)				
No. of events / patients	23/34	8/9	15/25	**0.014**
Median OS, months	28.7	18.5	32.8	
(95% CI)	(19.1, 39.3)	(6.5, 30.2)	(24.9, NE)	
1-year OS, %	76.5	55.6	84.0	
(95% CI)	(58.4, 87.5)	(20.4, 80.5)	(62.8, 93.7)	
2-year OS, %	61.8	33.3	72.0	
(95% CI)	(43.4, 75.7)	(7.8, 62.3)	(50.1, 85.6)	
3-year OS, %	35.3	11.1	44.0	
(95% CI)	(19.9, 51.0)	(0.6, 38.8)	(24.5, 61.9)	
Hazard ratio	-	1	0.35	
(95% CI)			(0.14, 0.84)	

CI, confidence interval; NE, not estimable
* 1 patient had unknown LMP2 status and was excluded from analysis